



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,394	01/09/2004	Michael Frank Walsh	WMFR-P01-001	9186

7590 09/10/2007
MICHAEL FRANK WALSH
10414 WOODBURY WOODS CT.
FAIRFAX, VA 22032

EXAMINER

GARCIA, ERNESTO

ART UNIT	PAPER NUMBER
----------	--------------

3679

MAIL DATE	DELIVERY MODE
-----------	---------------

09/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/754,394	Applicant(s) WALSH, MICHAEL FRANK	
	Examiner Ernesto Garcia	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,8,9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election of Species

Claim 3 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 13, 2004.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "10" as shown in the drawings filed on January 26, 2007.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2" has been used to designate both spring pin without an extension as shown in Figure 5 and a spring pin with an extension (Fig. 5). Note that

Art Unit: 3679

the drawings filed on May 12, 2005 attempted to correct this objection but the drawings were held unacceptable thus the drawings still need correction.

The drawings are objected to because the black shading in component 10 in Figures 1A, 1B, 3, 5, 8, and 14 is not permitted. See 37 CFR 1.84(m).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

on the paragraph bridging pages 4 and 5, the description of reference character "8" is inconsistent. Reference character 8 has been described as an "Internal Spring Trigger" and "trigger pin". The descriptions should remain consistent throughout the specification. Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "one or more ball bearing or slugs located in the main structure and within an internal geometry of the trap" recited in claims 1, 9, and 11, lines 5-6, and claim 6, lines 7-8.

Claim Objections

Claims 1, 6, 7, 9, and 11 are objected to because of the following informalities:

regarding claim 1, 6, 7, 9, and 11, --being adapted-- should be inserted after "trigger" in claim 1, line 8, claim 6, line 10, claim 7, line 7, and claims 9 and 11, line 8;

regarding claim 1, 6, 7, and 11, "the application of the low force" in claim 1, line 11, claim 6, line 13, and claims 7 and 11, line 11, should be --application of a low force--

;

regarding claim 9, "the string" in line 11 should be --a string--; and,
regarding claim 11, --the-- should be inserted before "one" in line 9. Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 5, 6, 8, 9, and 11 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The lift spring 4 is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Note that without the lift spring 4, the internal spring pin 2 would not move upwards retracting the release pin thus moving a position of the container. Reciting only the internal spring 3 does not make the mechanism operable since the internal spring 3 does not by itself release the release pin 7 between the ball bearings 6. Further, it should be noted that the paragraph that bridges pages 4 and 5, lines 19-21, states "When the trigger pin (8) is pulled out of the main housing (1), the internal spring pin (2) is freed and is pushed up by the lift spring (4). This removes the release pin (7) from between the ball bearings

(6).” Accordingly, the lift spring is essential for releasing the release pin from the ball bearings thus allowing the container to move.

Claim Rejections - 35 USC § 102

Claims 1, 2, 5, 6, 9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bemis, 3,066,632.

Regarding claim 1, Bemis discloses, in Figure 2, a low-force release mechanism comprising a main structure **110**, a trap **113**, an internal spring pin **51** with an internal spring **116**, a release pin **54**, a least one trigger **A1** (see marked-up attachment), one or more ball bearings **57**, and attachments **125** by which a container **T** is attached to the main structure **110** and the trap **113**. The release pin **54** is configured to be moveable to effect a position of the one or more ball bearings **57** located in the main structure **110** and within an internal geometry of the trap **113**. A load force is distributed to the main structure **110** and to the trap **113** away from the release pin **54**. The one or more ball bearings **57** interact with the internal geometry of the trap **113**. The position of the trap **113** is locked and held. The one or more ball bearings **57** retract upon removal of the release pin such that application of a low force on the trigger **A1** causes the internal spring pin **51** and the release pin **54** to move a position of the container.

Regarding claim 2, the release pin **54** and the one or more ball bearings **57** lock and hold the position of the trap **113**.

Regarding claim 5, the mechanism further comprises a hanger **60**.

Regarding claim 6, Bemis discloses, in Figure 2, a low-force release mechanism comprising a main structure **110**, a trap **113**, an internal spring pin **51** with an internal spring **116**, a release pin **54**, a movable hanger **60**, a least one trigger **A1**, one or more ball bearings **57**, and attachments **125** by which a container **T** is attached to the main structure **110** and the trap **113**. The release pin **54** is configured to be moveable to effect a position of the one or more ball bearings **57** located in the main structure **110** and within an internal geometry of the trap **113**. A load force is distributed to the main structure **110** and to the trap **113** away from the release pin **54**. The one or more ball bearings **57** interact with the internal geometry of the trap **113**. The position of the trap **113** is locked and held. The one or more ball bearings **57** retract upon removal of the release pin such that application of a low force on the trigger causes the internal spring pin **51** and the release pin **54** to move a position of the container.

Regarding claim 9, Bemis discloses, in Figure 2, a low-force release mechanism comprising a main structure **110**, a trap **113**, an internal spring pin **51** with an internal spring **116**, a release pin **54**, a least one trigger **A1** (see marked-up attachment), one or more ball bearings **57**, attachments **125** by which a container **T** is attached to the main

structure **110** and the trap **113**, and a string **61**. The release pin **54** is configured to be moveable to effect a position of the one or more ball bearings **57** located in the main structure **110** and within an internal geometry of the trap **113**. A load force is distributed to the main structure **110** and to the trap **113** away from the release pin **54**. The one or more ball bearings **57** interact with the internal geometry of the trap **113**. The position of the trap **113** is locked and held. The string **61** is attached to the trigger **A1**. The one or more ball bearings **57** retract upon removal of the release pin such that a user pulling on the string **61** causes the internal spring pin **51** and the release pin **54** to move a position of the container such that the container collapses releasing its contents.

Regarding claim 11, Bemis discloses, in Figure 2, a low-force release mechanism comprising a main structure **110**, a trap **113**, an internal spring pin **51** with an internal spring **116**, a release pin **54**, a least one trigger **A1** (see marked-up attachment), one or more ball bearings **57**, attachments **125** by which a container **T** is attached to the main structure **110** and the trap **113**, and a trap spring **114**. The release pin **54** is configured to be moveable to effect a position of the one or more ball bearings **57** located in the main structure **110** and within an internal geometry of the trap **113**. A load force is distributed to the main structure **110** and to the trap **113** away from the release pin **54**. The one or more ball bearings **57** interact with the internal geometry of the trap **113**. The position of the trap **113** is locked and held. The trap spring **114** and the ball bearings **57** interact with the geometry of the trap **110**. The one or more ball bearings **57** retract upon removal of the release pin such that application of a low force

on the trigger **A1** causes the internal spring pin **51** and the release pin **54** to move a position of the container.

Claim Rejections - 35 USC § 103

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bemis, 3,066,632.

Regarding claim 8, Bemis, as discussed, fails to disclose the container is selected from a group consisting a bag, a box, a collapsible box, and a net. Given the environment which Bemis's mechanism is used, one skilled in the art will utilize a net to drop off food aid in a flooded zone instead of dropping torpedoes. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a net to drop off food aid in a flooded zone.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Pew, 3,065,011, in view of Huff, 1,027,481.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 5, 6, 8, 9, and 11 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claim 7 is allowed.

The following is a statement of reasons for the indication of allowable subject matter:

regarding claim 7, the prior art of record does not disclose or suggest a low-force release mechanism comprising a lift spring that can move an internal spring pin (line 10) with an internal spring (line 3). The closest prior art, De Pew, 3,065,011, discloses an internal spring pin 12 with an internal spring 46; however, there's no need to provide a lift spring to move the internal spring pin 12 since the internal spring 46 moves the internal spring pin 12 and thus a lift spring is not required.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. In particular, the new limitation "one or more ball bearings or slugs located in the main structure and within an internal geometry of the trap" recited in claims 1, 9, and 11, lines 5-6, and claim 6, lines 7-8. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 3679

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

E.G.

Daniel P Stodola

E.G.

August 30, 2007

Attachment: one marked-up page of Bemis, 3,066,632

DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

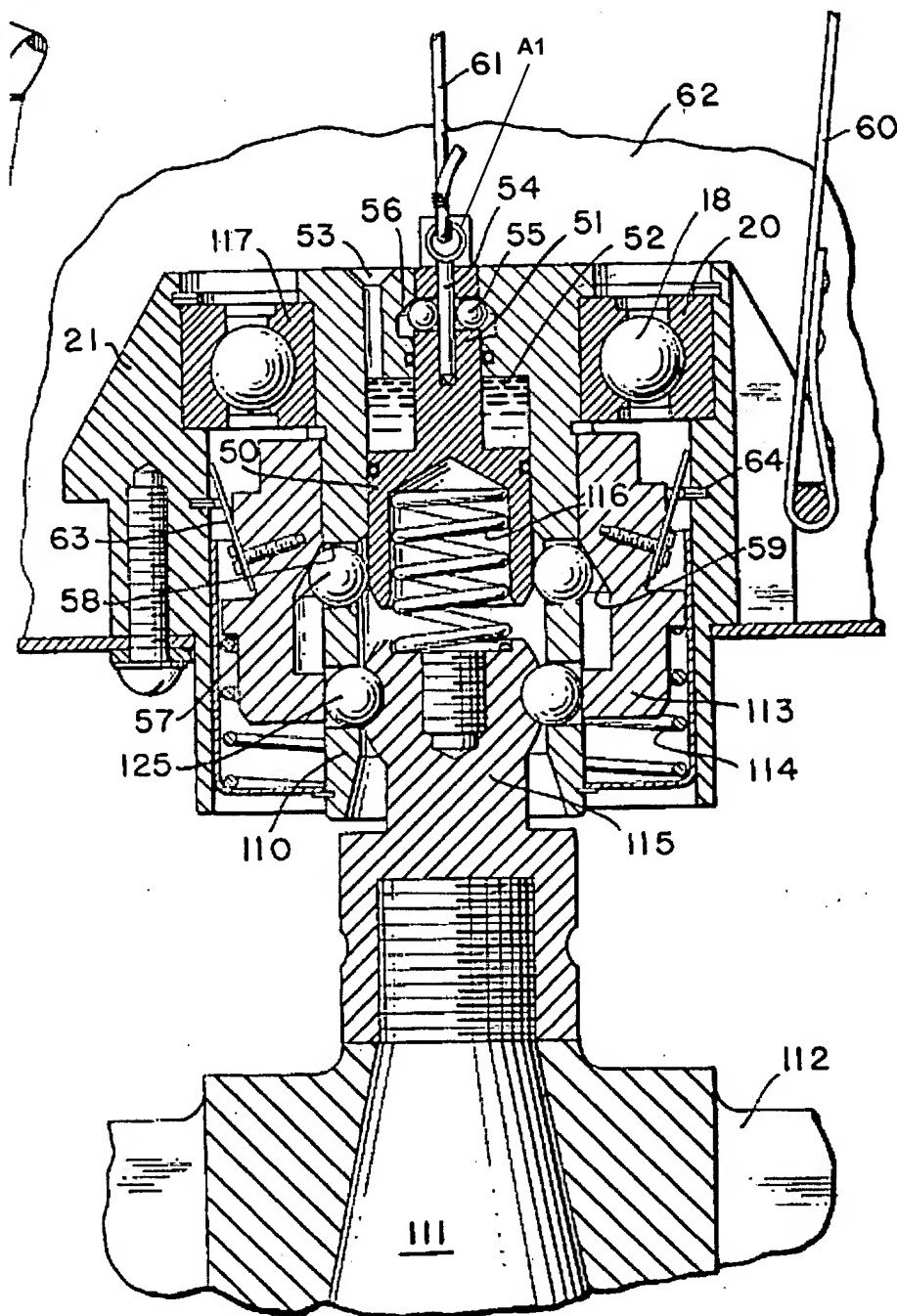


FIG. 2.